

## ABSTRACT

An output termination auto detection circuit includes a reference resistance having one side coupled to a known input voltage and selectively coupled into a signal line of an input device. The other side of the reference resistance is coupled  
5 to an output terminal of the input device which is coupled to the input of a host instrument. The host instrument has an input resistance termination that functions as the output termination of the input device. A detection device is coupled to a common mode between the reference resistance and the input resistance of the host instrument for measuring the voltage at the node. Knowing the reference resistance,  
10 the input voltage and the output voltage at the node, the output termination of the input device (i.e. the input termination of the host instrument) can be determined and a indication of an improperly terminated input device may be provided to a user.